

## WEST LAKE LANDFILL

**QUESTION:** *What is the EPA doing to prevent the underground smoldering from the Bridgeton landfill from spreading to the radioactive waste in the West Lake landfill?*

**ANSWER:**

- EPA Region 7 has ordered the Potentially Responsible Parties to prepare, for EPA approval, plans to construct an isolation barrier to separate the two landfills.
- Field studies/engineering surveys in the landfills are being conducted in two phases – a Gamma Cone Penetrometer Testing (GCPT) to determine if there are any gamma radiation readings above background levels and an engineering survey to locate radiologically-impacted material.
- The EPA has requested the U.S. Army Corps of Engineers to provide construction management and project oversight and assistance for the isolation barrier project. Agreement is nearing on an Interagency Agreement to fund the Corps work.
- When the survey data has been finalized and subjected to quality control checks, EPA Region 7 will make this data available to the public.

## BACKGROUND

- Testing underway has preliminarily located radiological material many feet below the surface in areas that will need to be analyzed to determine if the waste is associated with the disposal of leached barium sulfate and thus separated from the Bridgeton SSE.
- Since some municipal solid waste landfills contain waste that is radioactive, confirmation sampling is necessary to determine if the radiation is from the historic disposal of leached barium sulfate wastes or consumer products.
- Many consumer items contain naturally occurring radioactivity. For example, most residential smoke detectors contain a low-activity americium-241 source.
- During the engineering survey phase, sonic drilling and coring activity is bringing samples of underground material to the surface of the site under tightly controlled conditions for radiation field screening and off-site lab testing. All handling of core samples at the site is occurring inside a mobile enclosed protective structure.
- Air monitoring of the West Lake Landfill Site, conducted by the Missouri Department of Natural Resources and subsequent review of data by the Missouri Department of Health and Senior Services, will continue. No monitoring results to date indicate elevated radiation levels, further ensuring the health and safety of people living and working in the area near the West Lake and Bridgeton landfills.
- Soil cores may be drilled to a depth of up to 80 feet in some locations of the survey area. All material brought to the surface will be screened for radiation and stored on site in secured containers until it is either ready for shipment to a laboratory for testing, or deemed ready for

safe and proper disposal at an off-site facility to be identified.

- Contractors and EPA Region 7 staff working at the site follow detailed health and safety plans that provide for their protection.
- EPA Region 7 receives regular inquiries from Sens. Claire McCaskill and Roy Blunt, Reps. William Lacy Clay and Ann Wagner.

**QUESTION:** *Has radioactivity been found in groundwater at new locations at the site and is that contaminated groundwater moving as claimed by a local resident in a recent interview with a St. Louis radio talk show?*

**ANSWER:**

- Results from groundwater sampling events conducted in July 2012, April 2013 and July 2013 showed that the number of sampling wells with elevated levels of radium remained essentially the same, and the concentrations found in those wells were similar in each event.
- The drinking water provided at Lambert Airport, local businesses and virtually all residences near the landfill comes from regulated, treated and tested public water supply systems, and is safe to consume.
- Nearby, EPA Region 7 has collected water samples from six private wells located generally north of West Lake Landfill, and the testing of those samples has shown no concentrations of radium or contaminants exceeding the standard Maximum Contaminant Level.

**BACKGROUND**

- All of the groundwater data has been shared with the public, and remains available online. Region 7 is working with the U.S. Geological Survey to better understand groundwater conditions at this site.
- EPA Region 7 presently has no evidence to indicate contaminants in the groundwater at the West Lake Landfill site are moving to the Missouri River.

**RESOURCES**

The site is PRP-lead, meaning that the PRPs (including the U.S. Department of Energy) are paying for the additional studies and site work, and are reimbursing EPA staff for its time in overseeing the work.

(Dollars in Millions):

Approp.	FY 2013 Enacted		FY 2014 Enacted		FY 2014 Pres Bud	
	\$	FTE	\$	FTE	\$	FTE
SF	\$0.72M	1.45	\$0.23M	0.65	NA	NA

<b>Total</b>	<b>\$0.72M</b>	<b>1.45</b>	<b>\$0.23M</b>	<b>0.65</b>	<b>\$0.0M</b>	<b>0.0</b>
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